



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,659	05/07/2001	Markku Verkama	P-279243	5974

7590 03/03/2005  
PILLSBURY WINTHROP LLP  
1600 TYSONS BOULEVARD  
MCLEAN, VA 22102

EXAMINER

GEORGE, KEITH M

ART UNIT PAPER NUMBER

2663

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/787,659

Applicant(s)

VERKAMA ET AL.

Examiner

Keith M. George

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>Mar. 21, 2001</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Yuan, U.S.

Patent 6,496,704, hereinafter Yuan.

3. Referring to claims 1 and 12, Yuan teaches in figure 3 a Mobile IP that may be illustrated with reference to a conventional Internet protocol network that interconnects a home network, a foreign network, and one or more other networks. The foreign network includes a plurality of hosts and a foreign agent (FA) 82 which is shown in figure 3 as being the router/gateway that interfaces the foreign network to the Internet (installing into the packet radio network a foreign agent having an IP address) (column 3, lines 52-55, 63-66). The foreign agent advertises its presence with agent advertising messages. The agent advertisement message includes one or more Care-of-Addresses (COA) signals from the foreign agent (providing a care-of-address for the mobile station) (column 4, lines 15-16, 26-28). The Care-Of-Address filed refers to the address of the foreign agent that is receiving packets on behalf of the mobile host. The home agent intercepts packets destined for the mobile host and then encapsulates the packet using the COA provided in connection with registration of the mobile host (using the IP address of the

Art Unit: 2663

foreign agent as the mobile station's care-of-address) (column 5, lines 11-13, 21-25). It is also clearly taught in figure 3 that the Foreign Agent (FA) 82 is integrated into a support node in the radio packet network. Yuan clearly indicates that the FA is a support node by stating the FA is a router/gateway that interfaces the foreign network to the Internet (column 3, lines 64-65).

4. Referring to claims 2, 3 and 9-11, Yuan has clearly taught the method described in reference to claim 1 above where it was clearly taught the FA acts as a router (access node) or a gateway (gateway node).

5. Referring to claims 5 and 6, Yuan teaches the method described in reference to claim 1 above and also teaches that the agent advertisement message includes one or more Care-of-Address (COA) signals from the foreign agent, an indication of the encapsulation types supported by the foreign agent, and indication of the registration lifetime, and an advertisement sequence number. Once the mobile host detects the network change from the agent advertisement message, the mobile host initiates the registration process with the home agent (sending the access point name to a gateway) (column 4, lines 26-35). This information clearly indicates to the mobile host that the foreign agent is not the home agent and this information identifies the foreign agent to the mobile host (provides an access point name and Mobile IP address).

6. Referring to claim 7, Yuan teaches the method described in reference to claim 1 above and also teaches that different authentication schemes may be employed by the mobile host, the home agent, and the foreign agent, through service agreements in advance (storing information concerning whether the mobile station in question is allowed to use the IP-type mobility service) (column 4, lines 50-52).

Art Unit: 2663

7. Referring to claims 8 and 14, Yuan teaches the method described in reference to claim 1 above and it is also clearly understood that if the mobile host is registering to the home agent with the COA of the foreign agent, the mobile host clearly is request use of the IP Mobility service.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuan in view of Penners et al., U.S. Patent 5,793,762, hereinafter Penners. Yuan teaches the method described in reference to claim 7 above with the possible exception of teaching a Home Location Register. Penners teaches a Home Location Register for storing and providing subscription data (column 6, lines 39-41). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to implement the Home Location Register of Penners in the Mobile IP network of Yuan. One of ordinary skill in the art would have been motivated to do this in order to keep track of where the mobile terminals are registered in order to deliver calls thereto (column 6, lines 41-42).

Art Unit: 2663

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith M. George whose telephone number is 571-272-3099. The examiner can normally be reached on M-Th 7:00-4:30, alternate F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Keith M. George  
24 February 2005



CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 000

2/24/05